

Weissmueller et al.

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[54] CO-ORDINATE DETECTION SYSTEM

4,346,376 8/1982 Mallos ..... 250/549

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[57] **ABSTRACT**

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The invention is directed to an X-Y co-ordinate detection system of the type which generates intersecting paths of radiation across a surface which may be, for example, a touch panel of the cathode ray tube type. Less expensive and more reliable operation is provided by developing the paths of radiation by use of radiation-emissive material disposed near at least one edge of the surface and excited by a flying spot of energy, such as an electron beam. In the preferred embodiment, strips of infrared emissive material are disposed on an internal surface of a cathode ray tube's panel and excited by overscanning the tube's electron beam to develop intersecting paths of infrared radiation across the tube's faceplate.

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G08C 9/00

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340/365 P

[58] **Field of Search** ..... 250/221, 549; 313/474;  
340/706, 365 P, 712

## [56] References Cited

## U.S. PATENT DOCUMENTS

3,764,813	10/1973	Clement et al. ....	250/221
3,860,754	1/1975	Johnson et al. ....	340/365 P
4,313,109	1/1982	Funk et al. ....	250/221

**22 Claims, 12 Drawing Figures**

